

Application No.: 10/826,321

Docket No.: 026746.101-US01

PROPOSED AMENDMENT FOR DISCUSSION AT INTERVIEW

1. (Currently Amended) An apparatus for use in RF shielding, comprising:
a holder comprising RF shielding and configured for forming a substantially complete and substantially continuous RF shield when the holder is adjoined to ~~the cavity a~~ surface defining a cavity of a magnet associated with magnet-RF-shielding so that the holder is electrically coupled to a radio-opaque cryostat of the magnet.
2. (Original) The apparatus of claim 1, wherein the holder comprises a bottom portion comprising RF shielding.
3. (Original) The apparatus of claim 2, wherein the holder further comprises a canopy comprising RF shielding.
4. (Original) The apparatus of claim 2, wherein the holder further comprises a patient end cap comprising RF shielding.
5. (Original) The apparatus of claim 3, wherein the canopy removably attaches to the bottom portion.
6. (Original) The apparatus of claim 2, wherein the bottom portion comprises apertures.
7. (Original) The apparatus of claim 4, wherein the patient end cap comprises apertures.
8. (Original) The apparatus of claim 1, further comprising a positioning means attached to the holder.

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9. (Original) The apparatus of claim 8, wherein the positioning means comprises a support configured to support the holder and means for locomotion.

10. (Original) The apparatus of claim 9, wherein the means for locomotion comprises wheels.

11. (Original) The apparatus of claim 9, wherein the means for locomotion comprises rollers.

12. (Original) The apparatus of claim 1, further comprising a patient support unit.

13. (Original) The apparatus of claim 12, wherein the patient support unit comprises an RF transmitter antenna and an RF receiver antenna.

14. (Original) The apparatus of claim 12, wherein the patient support unit comprises an RF coil.

15. (Original) The apparatus of claim 12, wherein the patient support unit comprises a support configured to hold an animal.

16. (Original) The apparatus of claim 12, wherein the patient support unit comprises a support configured to hold a human.

17. (Original) The apparatus of claim 15, wherein the support is configured to hold an animal in an inverted position.

18. (Original) The apparatus of claim 17, wherein a cross section of the support is configured to substantially match the curvature of an animal's spine.

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19. (Original) The apparatus of claim 18, wherein a cross section of the support is substantially U-shaped.

20. (Original) The apparatus of claim 18, wherein a cross section of the support is substantially V-shaped.

21. (Original) The apparatus of claim 18, wherein the patient support unit comprises an RF transmitter antenna and an RF receiver antenna.

22. (Original) The apparatus of claim 18, wherein the patient support unit comprises an RF coil.

23. (Original) The apparatus of claim 22, wherein the RF coil comprises a non-planar coil.

24. (Original) The apparatus of claim 23, wherein a cross section of the RF coil substantially matches a cross section of the support.

25. (Original) The apparatus of claim 23, wherein the RF coil comprises a plurality of loops.

26. (Original) The apparatus of claim 22, wherein the RF coil comprises an upper RF coil connected to a lower RF coil.

27. (Original) The apparatus of claim 22, wherein the RF coil is movable.

28. (Original) The apparatus of claim 15, wherein the patient support unit comprises straps for holding an animal.

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29. (New) The apparatus of claim 1, wherein the holder comprises a rigid material of a predetermined shape.
30. (New) The apparatus of claim 1, wherein the surface defines an opening of a predetermined size at a patient end of the magnet, and wherein the holder defines a corresponding opening of a corresponding size configured to abut and adjoin to the surface.
31. (New) The apparatus of claim 30, wherein the opening of the magnet and the corresponding opening of the holder have a substantially circular shape.
32. (New) The apparatus of claim 1, wherein the holder is configured to hold and support the body of an animal patient.
33. (New) The apparatus of claim 1, wherein the apparatus comprises the magnet and ancillary magnets associated with a magnetic resonance imaging process, wherein the RF shield encloses all of the ancillary magnets.
34. (New) The apparatus of claim 1, wherein the substantially complete and substantially continuous RF shield prevents all RF signals that could interfere with a magnetic resonance imaging measurement from passing from an area outside the RF shield to an area inside the RF shield.
35. (New) The apparatus of claim 1, wherein the substantially complete and substantially continuous RF shield has substantially no visible gaps or holes through which could pass an RF signal that could interfere with a magnetic resonance imaging measurement.

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36. (New) The apparatus of claim 1, wherein the magnet is configured to remain stationary while a patient is moved wholly or partly into the cavity of the magnet.

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PROPOSED AMENDMENT FOR DISCUSSION AT INTERVIEW

1. (Currently Amended) A method of providing RF shielding for a patient comprising:

placing the patient on a holder, the holder comprising RF shielding configured for forming a substantially complete and substantially continuous RF shield around the patient when the holder is adjoined to ~~the cavity~~ a surface defining a cavity of a magnet associated with magnet-RF-shielding so that the holder is electrically coupled to a radio-opaque cryostat of the magnet; and

adjoining the holder to ~~the cavity~~ the surface defining the cavity of the magnet.

2. (Original) The method of claim 1, further comprising placing an RF shield over the service end of the magnet.

3. (Original) The method of claim 1, wherein the holder comprises a bottom portion comprising RF shielding.

4. (Original) The method of claim 3, wherein the holder further comprises a canopy comprising RF shielding.

5. (Original) The method of claim 3, wherein the holder further comprises a patient end cap comprising RF shielding.

6. (Original) The method of claim 4, wherein the canopy removably attaches to the bottom portion.

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7. (Original) The method of claim 5, wherein the patient end cap removably attaches to the bottom portion or is integral to the bottom portion.
8. (Original) The method of claim 5, wherein the patient end cap comprises apertures.
9. (Original) The method of claim 3, wherein the bottom portion comprises apertures.
10. (Original) The method of claim 1, wherein the magnet-RF-shielding comprises a service end cap.
11. (Currently Amended) The method of claim 1, wherein the magnet-RF-shielding ~~further~~ comprises a the cryostat.
12. (Original) The method of claim 11, wherein the magnet-RF-shielding further comprises an RF shield liner configured to combine with the service end cap and the holder-RF-shielding to form a substantially complete RF shield.
13. (Original) The method of claim 1, further comprising a positioning means attached to the holder.
14. (Original) The method of claim 13, wherein the positioning means comprises a support configured to support the holder and means for locomotion.
15. (Original) The method of claim 14, wherein the means for locomotion comprises wheels.

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16. (Original) The method of claim 14, wherein the means for locomotion comprises rollers.
17. (Original) The method of claim 1, wherein the holder further comprises a patient support unit.
18. (Original) The method of claim 1, wherein the patient support unit comprises an RF transmitter antenna and an RF receiver antenna.
19. (Original) The method of claim 17, wherein the patient support unit comprises an RF coil.
20. (Original) The method of claim 1, where the patient is an animal.
21. (Original) The method of claim 20, wherein the patient support unit comprises a support configured to hold an animal.
22. (Original) The method of claim 1, where the patient is human.
23. (Currently Amended) ~~The apparatus~~ method of claim 22, wherein the patient support unit comprises a support configured to hold a human.
24. (Original) The method of claim 21, wherein the support is adapted to hold an animal in an inverted position.
25. (Original) The method of claim 24, wherein a cross section of the support is configured substantially to match the curvature of an animal's spine.

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26. (Original) The method of claim 25, wherein a cross section of the support is substantially U-shaped.

27. (Original) The method of claim 25, wherein a cross section of the support is substantially V-shaped.

28. (Original) The method of claim 21, wherein the patient support unit comprises straps for holding an animal.

29. (New) The method of claim 1, wherein the holder comprises a rigid material of a predetermined shape.

30. (New) The method of claim 1, wherein the surface defines an opening of a predetermined size at a patient end of the magnet, wherein the holder defines a corresponding opening of a corresponding size configured to abut and adjoin to the surface.

31. (New) The method of claim 30, wherein the opening of the magnet and the corresponding opening of the holder have a substantially circular shape.

32. (New) The method of claim 1, wherein the holder is configured to hold and support the body of an animal patient.

33. (New) The method of claim 1, wherein the magnet is configured for use in a magnetic resonance imaging system comprising the magnet and ancillary magnets associated with a magnetic resonance imaging process, wherein the RF shield encloses all of the ancillary magnets.

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34. (New) The method of claim 1, wherein the substantially complete and substantially continuous RF shield prevents all RF signals that could interfere with a magnetic resonance imaging measurement from passing from an area outside the RF shield to an area inside the RF shield.

35. (New) The method of claim 1, wherein the substantially complete and substantially continuous RF shield has substantially no visible gaps or holes through which could pass an RF signal that could interfere with a magnetic resonance imaging measurement.

36. (New) The method of claim 1, wherein the magnet is configured to remain stationary while the holder is adjoined to the surface defining the cavity of the magnet.